

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 04-080946

(43)Date of publication of application : 13.03.1992

(51)Int.Cl.

H01L 21/82  
G06F 15/60

(21)Application number : 02-194072

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(22)Date of filing : 24.07.1990

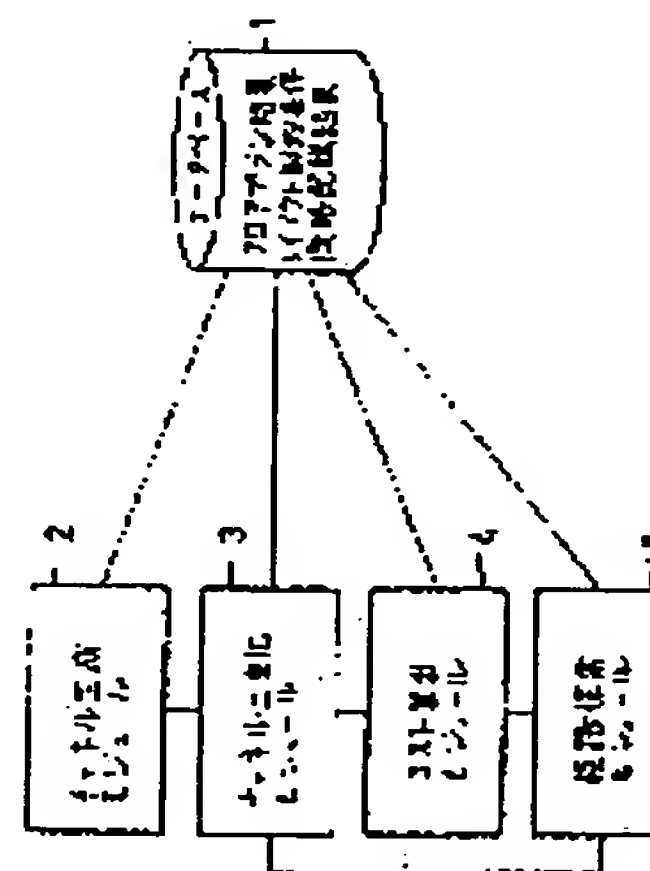
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(54) AUTOMATIC SCHEMATIC WIRING DEVICE FOR ANALOG INTEGRATED CIRCUIT  
DIGITAL INTEGRATED CIRCUIT MIXEDLY MOUNTED LSI

(57)Abstract:

PURPOSE: To obtain an automatic schematic wiring device for an analog integrated circuit digital integrated circuit mixedly mounted LSI using a CAD, which prevents various crosstalks from being generated and can satisfy various constraint conditions at an analog part, by a method wherein a channel between the analog part and a digital part is doubled and the minimum value of the costs of individual channels is calculated and set on the basis of channel lengths, the constraint conditions and the like.

CONSTITUTION: A channel creating module 2 forms channels on the basis of data in a data base 1, expresses the channels in a data structure, such as a channel graph or the like, transfers the expressed channels to the base 1 and makes the base 1 store the channels. A channel doubling module 3 obtains information on the channels from the base 1 and doubles the channel only at the boundary between an analog part and a digital part. A cost calculating module 4 calculates the cost of each channel in every net. A path searching module 5 searches such a wiring path as the sum of the costs, which are calculated by the module 4, of the channels is minimized and sends the result of a schematic wiring to the base 1.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision]